



BEYOND DISTILLER

PART 1: PDF—*More Than Just a File Format*

Introduction

Mapmakers discovered the usefulness of Adobe's Portable Document Format for publishing maps on the Internet years ago. By printing a digital map to a PostScript file and converting the result to a PDF file with Adobe Acrobat Distiller, a very close facsimile of the original map can be made available to Internet and intranet users, who need only a free copy of Adobe's Acrobat Reader installed on their computer. In most cases a PDF map can be viewed and printed from within a web browser.

King County GIS professionals have taken advantage of PDF for online publishing of such projects as the King County [Parks and Trails Atlas](#) and the King County Department of Transportation [Bicycling Guidemap](#). The KCGIS [Virtual Map Counter](#) makes extensive use of PDF.

A means for converting digital maps into a convenient, widely readable format is reason enough for mapmakers to use Adobe Acrobat in their work. There are, however, many additional capabilities of Acrobat that are often overlooked. The purpose of this presentation, *Beyond Distiller*, is to encourage mapmakers to take even greater advantage of Acrobat's capabilities for the benefit of their audience.

The following information is not of a how-to nature. The Acrobat documentation does that quite well. Rather, this is meant to point mapmakers to features of which they might not already be aware, and suggest how they might be used.

Basic Navigation

Acrobat offers two tools that are especially useful for creating navigation links within PDF maps: the Link tool and the Bookmark tool. A third Acrobat tool, the Form Tool, can be used to create Buttons that are similar to links, but will be discussed only briefly here.

Links

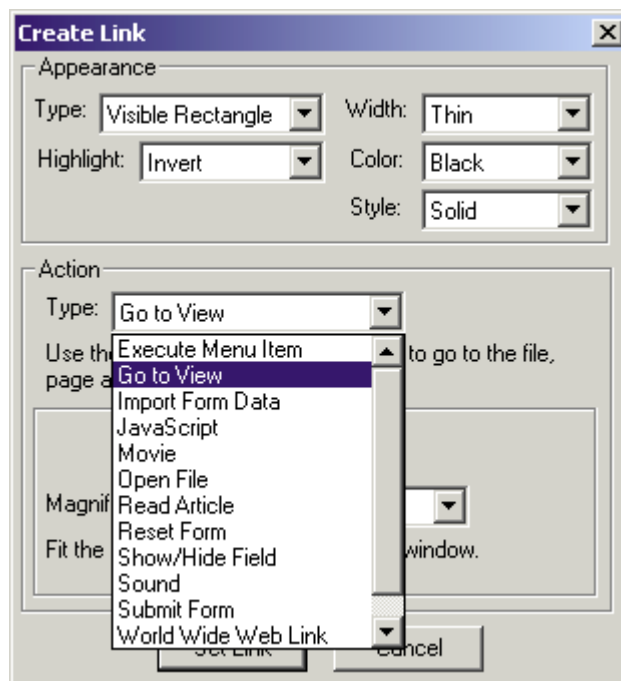
Creating links in a PDF document is very similar to creating image-map links on an HTML page using a graphical web-page-editing program, such as FrontPage. One selects the Link Tool, drags a rectangular shape around the area on the PDF page that will serve as the link, and then associates and defines an action for the link.

There are numerous action options, as can be seen in the following screen shot:

The two that we are most concerned with here for map navigation are “Go to View” and “World Wide Web Link.”

“Go to View” allows one to set a particular page view

within the same PDF document as a link destination. One possible use for this in a map would be make a legend box into a



link so that when a user clicks on the legend box the view changes to an enlarged view centered on the legend box, making it readable to the user. Or in a multi-page PDF document, one could set a link to take the user to a different page, from a map on one page to a map on another page, for example.

For some live examples, click on the following link to the Olympic Pipe Line *Panel Index* on the Virtual Map Counter. Try clicking on the title block. Return to full-page view (using Acrobat Reader's full-page button) and then click on the text block in the lower right corner of the index map. [Go >>](#)

"World Wide Web Link" is self-explanatory. The linked area in the PDF file can be set to an http: or ftp: address. For an example of this go to the Pipe Line Index map again and click on any of the bold map segment numbers and note what happens. [Go >>](#)

Each map segment number links to a separate PDF file of the corresponding map segment. Furthermore, on each of these segment maps, the small index map in the corner links back to the map Index Map PDF. Alternatively, one could create links within each of these small index maps to the various segment map PDF files. When creating a system of PDF links one should anticipate the needs of the user and the most likely intuitive expectations of the user. In this example, would the user be better served by being able to jump from map segment to map segment without returning to the main index?

Bookmarks

PDF Links and Bookmarks can perform the same actions, but rather than being distributed throughout a PDF page or document, Bookmarks provide an ordered list of actions in one location— within the Acrobat Reader navigation pane.

With Acrobat one can set a PDF file to open with the navigation pane visible, which is a good idea if one has included Bookmarks in the file. You have probably noticed that the Olympic Pipe Line

Panel Index has been set up this way. Return to the Index now and click on some of the Bookmarks to see what happens.

Note that Bookmarks can be hierarchical (click on the “+” next to “Panel Index” to reveal lower-level bookmarks). Also, Bookmarks can be given descriptive labels.

Form Tool Buttons

Acrobat Buttons provide certain interactive options not available with Links. Buttons are created using the Form Tool. Refer to the Acrobat documentation to explore Button capabilities. For now, see if you can find the rollover button on the Olympic Pipe Line *Panel Index* (hint: the button links to a page on the Olympic Pipe Line Company Web site).

Basic Navigation: Conclusion

Like any good software, Adobe Acrobat provides a rich and varied set of tools. It is up to the creator of PDF documents to decide how best to use those tools. The Portable Document Format makes maps accessible to remote users. Used wisely Acrobat’s navigation tools can take PDF maps beyond mere accessibility.



More to Come

This is a document in progress. Additions and updates will be announced on the [King County GIS Center home page](#). Send your questions to [Patrick Jankanish](#) in the King County GIS Center.